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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,356	04/20/2004	Richard Carl Phelps	0120-027	2594

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EXAMINER

CLEARY, THOMAS J

ART UNIT	PAPER NUMBER
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2111

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/827,356

Applicant(s)

PHELPS ET AL

Examiner

Thomas J. Cleary

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/787,353.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20041215.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

The Examiner's attention is also directed to the following copending U.S. patent applications:

- 09/787,353 naming Richard C. PHELPS et al. as inventors and filed June 12, 2001;
- 10/827,359 naming Richard C. PHELPS et al. as inventors and filed April 20, 2004;
- 10/827,360 naming Richard C. PHELPS et al. as inventors and filed April 20, 2004;
and
- 10/827,361 naming Richard C. PHELPS et al. as inventors and filed April 20, 2004.

TJC

In accordance with MPEP § 609IIC(2) (Rev. 2, May 2004, page 600-138), it is requested that the Office return a copy of this Information Disclosure Statement with the Examiner's initials adjacent to this paragraph indicating that these copending applications have been considered. By citation to the copending applications, confidentiality is not waived and the Office is requested to maintain the confidentiality of the copending applications under 35 U.S.C. § 122

This information is being submitted within 3 months of the filing or entry of the national stage of this application or before the first Office Action on the merits, whichever is later, therefore no fee or statement is required under 37 C.F.R. §1.97(b).

This Information Disclosure Statement contains information that is not in the English language but was cited in a search report or other action by a foreign patent office in a counterpart foreign application. In accordance with M.P.E.P. § 609A(3), an English language version of the search report or action which indicates the degree of relevance found by the foreign office is being submitted herewith.

[Handwritten Signature]
25-Apr-03

DETAILED ACTION

Priority

1. Acknowledgment is made of Applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/787,353, filed on 16 March 2001.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the Applicant regards as his invention.
3. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.
4. In reference to Claim 1, it is unclear if it is the address range or the memory map which includes the target address data.
5. In reference to Claim 1, it is unclear how the target module can be assigned an address range in the memory map (See Lines 15-17) if each module has already been assigned an address range in the memory map (See Lines 6-7). It is unclear if

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assigning, to the target module, an address range in memory map which includes the target address data is separate from assigning, to each module, an address range in the memory map of the apparatus.

6. In reference to Claim 2, it is unclear how the transaction request to the control means can forward itself to the control means. It is further unclear if the "transaction request" is being forwarded to the "control means" or if "the transaction request to the control means" is being forwarded elsewhere.

7. Claim 2 recites the limitation "the transaction request to the control means" in Lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 2, and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent Number 4,669,079 to Blum ("Blum").

10. In reference to Claim 1, Blum discloses an apparatus for use in a computer system comprising: a bus architecture (See Figure 1 Numbers 10, 11, and 12); a plurality of modules connected to the bus architecture, each module being assigned an address range in a memory map of the apparatus (See Figure 1 Numbers 6, 7, 8, and 9); each module comprising (See Column 2 Lines 25-28 and Column 2 Line 65 – Column 3 Line 2): reception means for receiving and storing availability data indicative of the availability of modules (See Column 4 Lines 28-33); transaction request means for producing a transaction request including target address data indicating a target location in the memory map for the transaction (See Column 4 Lines 54-56); decoding means for decoding the target address data to produce identity data relating to a target module, the target module being assigned an address range in the memory map which includes the target address data (See Column 4 Lines 54-60); comparison means for analysing the stored availability data corresponding to the target module identified by the identity data (See Column 4 Lines 54-57); and transaction means, responsive to the comparison means, for terminating the transaction request if the analysed availability data indicates that the target module is unavailable (See Column 4 Lines 28-33).

11. In reference to Claim 2, Blum discloses the limitations as applied to Claim 1 above. Blum further discloses a control means for controlling access to the bus architecture by the modules and wherein the transaction request to the control means is operable to forward the transaction request to the control means, if the analysed

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availability data indicates that the target module is available (See Column 4 Lines 28-33).

12. In reference to Claim 3, Blum discloses the limitations as applied to Claim 1 above. Blum further discloses a computer system comprising the apparatus (See Figure 1 and Column 2 Lines 34-35).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blum as applied to Claim 1 above, and further in view of US Patent Number 5,761,516 to Rostoker et al.

15. In reference to Claim 4, Blum teaches the limitations as applied to Claim 1 above. Blum does not teach an integrated circuit comprising the apparatus. Rostoker teaches an integrated circuit having a plurality of devices, which can include processors, memory controllers, and I/O controllers (See Figure 2 and Column 2 Lines 10-16).

It would have been obvious to construct the device of Blum, which can include processors, memory controllers, and I/O controllers (See Figure 1 of Blum) on the integrated circuit of Rostoker, resulting in the invention of Claim 4, in order to provide a more cost-effective use of silicon real estate and provide much better price performance than conventional multichip designs (See Column 1 Line 65 – Column 2 Line 9 of Rostoker).

Drawings

16. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: Figure 1 Numbers 1 and 2; Figure 13 Letters D and H; Figure 14 Numbers 28 and 29; Figures 15, 16, 17, 18, and 19 Number 30; Figure 21 Numbers 35, 36, and 37; Figure 22 Numbers 39, 40, 41, and 42; Figure 26 Numbers 56, and 57; Figure 28 Number 73; Figure 29 Number 84. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

17. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "A" has been used to designate both "start" in Figure 13 and "assign initial stack positions" on Page 17 Lines 23-25. A proposed drawing

correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

18. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "B" has been used to designate both "assign initial stack positions" in Figure 13 and "receive respective transaction requests" on Page 17 Lines 30-32. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

19. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "C" has been used to designate both "receive transaction request" in Figure 13 and "determine highest priority level" on Page 18 Lines 3-7. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Information Disclosure Statement

20. The information disclosure statement filed 15 December 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document;

each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Conclusion

21. The following prior art made of record and not relied upon is considered pertinent to Applicant's disclosure: US Patent Number 6,223,237 to McDermid; US Patent Number 4,038,644 to Duke et al.; US Patent Number 4,419,724 to Branigin et al.; and US Patent Number 4,326,250 to McCullough et al.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Thomas J. Cleary whose telephone number is 571-272-3624. The Examiner can normally be reached on Monday-Thursday (7-3:30), Alt. Fridays (7-2:30).

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mark H. Rinehart can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

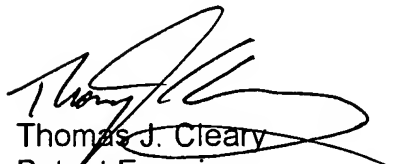
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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